

QY	1	MDIVYSGSRPLWADSFHILAGSDILSRISIAEETIYHASFISCISSILDDOGGEQEBRG	60
Db	1	MDIVYSGSRPLWADSFHILAGSDILSRISIAEETIYHASFISCISSILDDOGGEQEBRG	60
QY	61	HEWRPRLICEADAMEQVOYVLPRLPLLOGSGKSNVAMGDYDSDAFMDPRYHAGEBDL	120
Db	61	HEWRPRLICEADAMEQVOYVLPRLPLLOGSGKSNVAMGDYDSDAFMDPRYHAGEBDL	120
QY	121	KLIRAAAMGKVPKRKLIMLEBDTVNKRDKOKRTALHLASANGNSNVYKVLVLDRCQOLNV	180
Db	121	KLIRAAAMGKVPKRKLIMLEBDTVNKRDKOKRTALHLASANGNSNVYKVLVLDRCQOLNV	180
QY	181	LDNRKKTALTKAVOCQOEDECALMLLEHGTPNTPIDEYGNVTLHYAVYNEDKLMARALLLY	240
Db	181	LDNRKKTALTKAVOCQOEDECALMLLEHGTPNTPIDEYGNVTLHYAVYNEDKLMARALLLY	240

```

OY 241 GADIESKKNHGLTPLLGIHEKQOQVVKFLIKKKANLMDRYGRTALLIIVCCGSASIV 300
      |||||||
Db 241 GADIESKKNHGLTPLLGIHEKQOQVVKFLIKKKANLMDRYGRTALLIIVCCGSASIV 300
OY 301 SPLEQNDVSSODLERPESMLFLVIIM 329
      |||||||
Db 301 SPLEQNDVSSODLERPESMLFLVIIM 329

RESULT 2
US-09-439-313-532
; Sequence 532, Application US/09439313
; Patent No. 6329505
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Harlocker, Susan Louise
; APPLICANT: Jiang Yuqul
; APPLICANT: Reed, Steven G.
; APPLICANT: Kalos, Michael
; APPLICANT: Fanger, Gary
; APPLICANT: Retter, Mark
; APPLICANT: Solk, John
; APPLICANT: Day, Craig
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
; FILE REFERENCE: 210121.427C9
; CURRENT APPLICATION NUMBER: US/09/439,313
; CURRENT FILING DATE: 1999-11-12
; NUMBER OF SEQ ID NOS: 575
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 532
; LENGTH: 292
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-439-313-532

Query Match 73.1%; Score 1253; DB 4; Length 292;
Best Local Similarity 98.8%; Pred. No. 2.7e-135;
Matches 241; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

OY 86 PLOGSGSKSNVWANGDYDDSAFMDPRYHVHGEDLDKLRHAAWGVPRKDLIYMLRDTDV 145
      | : |||||
Db 49 PCCGSGSKSNVWANGDYDDSAFMDPRYHVHGEDLDKLRHAAWGVPRKDLIYMLRDTDV 108
OY 146 NKRDOKRTALHLASANGNSEVVKLVLDRCQLNVLDNKKRTALTAVOCOEDECALMLL 205
      |||||||
Db 109 NKRDOKRTALHLASANGNSEVVKLVLDRCQLNVLDNKKRTALTAVOCOEDECALMLL 168
OY 206 EHGTDPNIPDEYGNITLHYAVYNEDKLMARALLIYGADIESKKNHGLTPLLGIHEKQOQ 265
      |||||||
Db 169 EHGTDPNIPDEYGNITLHYAVYNEDKLMARALLIYGADIESKKNHGLTPLLGIHEKQOQ 228
OY 266 VKFLIKKKANLMDRYGRTALLIIVCCGSASIVSPLEQNDVSSODLERPESMLFL 325
      |||||||
Db 229 VKFLIKKKANLMDRYGRTALLIIVCCGSASIVSPLEQNDVSSODLERPESMLFL 288
OY 326 VIIM 329
      ||||
Db 289 VIIM 292

RESULT 3
US-09-439-313-379
; Sequence 379, Application US/09439313
; Patent No. 6329505
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Harlocker, Susan Louise
```

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; APPLICANT: Jiang Yuqul
; APPLICANT: Reed, Steven G.
; APPLICANT: Kalos, Michael
; APPLICANT: Fanger, Gary
; APPLICANT: Retter, Mark
; APPLICANT: Solk, John
; APPLICANT: Day, Craig
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
; FILE REFERENCE: 210121.427C9
; CURRENT APPLICATION NUMBER: US/09/439,313
; CURRENT FILING DATE: 1999-11-12
; NUMBER OF SEQ ID NOS: 575
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 379
; LENGTH: 656
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-439-313-379

Query Match 66.3%; Score 1136; DB 4; Length 656;
Best Local Similarity 93.9%; Pred. No. 2.5e-121;
Matches 216; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

OY 86 PLOGSGSKSNVWANGDYDDSAFMDPRYHVHGEDLDKLRHAAWGVPRKDLIYMLRDTDV 145
      | : |||||
Db 107 PCCGSGSKSNVWANGDYDDSAFMDPRYHVHGEDLDKLRHAAWGVPRKDLIYMLRDTDV 166
OY 146 NKRDOKRTALHLASANGNSEVVKLVLDRCQLNVLDNKKRTALTAVOCOEDECALMLL 205
      |||||||
Db 167 NKRDOKRTALHLASANGNSEVVKLVLDRCQLNVLDNKKRTALTAVOCOEDECALMLL 226
OY 206 EHGTDPNIPDEYGNITLHYAVYNEDKLMARALLIYGADIESKKNHGLTPLLGIHEKQOQ 265
      |||||||
Db 227 EHGTDPNIPDEYGNITLHYAVYNEDKLMARALLIYGADIESKKNHGLTPLLGIHEKQOQ 286
OY 266 VKFLIKKKANLMDRYGRTALLIIVCCGSASIVSPLEQNDVSSODLERPESMLFL 325
      |||||||
Db 287 VKFLIKKKANLMDRYGRTALLIIVCCGSASIVSPLEQNDVSSODLERPESMLFL 336
```

```

RESULT 4
US-09-439-313-380
; Sequence 380, Application US/09439313
; Patent No. 6329505
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Harlocker, Susan Louise
; APPLICANT: Jiang Yuqul
; APPLICANT: Reed, Steven G.
; APPLICANT: Kalos, Michael
; APPLICANT: Fanger, Gary
; APPLICANT: Retter, Mark
; APPLICANT: Solk, John
; APPLICANT: Day, Craig
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
; FILE REFERENCE: 210121.427C9
; CURRENT APPLICATION NUMBER: US/09/439,313
; CURRENT FILING DATE: 1999-11-12
; NUMBER OF SEQ ID NOS: 575
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 380
; LENGTH: 671
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-439-313-380

Query Match 66.3%; Score 1136; DB 4; Length 671;
```

Best Local Similarity	93.9%	Pred. No. 2.6e-121;	
Matches 216;	Conservative 7;	Mismatches 7;	Indels 0;
			Gaps 0;

QY	86	PLIOSSGSSNVVANGDDYDSDSFMEDPRVHNGEDDDKJLHRAAMGKVPKRLIYMLRPTDV	143
Dd	107	PCCRSSGSKSGKGAAGDDSDSFMFEPRIYHVRGDEDJDKJLHRAAMGKVPKRLIYMLRPTDV	166
QY	146	NKRDQKRTALHLTASANGNSEFVLLVJDRRCQLNVLDNKKRTALTATKFAVCOEDBCALMML	205
Dd	167	NKKDKQRTALHLTASANGNSEFVLLVJDRRCQLNVLDNKKRTALIKFAVCOEDBCALMML	226
QY	206	EHGDPNIPDEYGTITLHYVYNNEDKJLMAKALLLYGADIESKNKHGLTPLLGIHNEQOQ	265
Dd	227	EHGDPNIPDEYGTITLHYVYNNEDKJLMAKALLLYGADIESKNKHGLTPLLGIHNEQOQ	286
QY	266	VVKFLIKKKANLMDRGRTALTLAVCCSGASIVSLTEONDVSSODL	315
Dd	287	VVKFLIKKKANLMDRGRTALTLAVCCSGASIVSLTEONDVSSODL	336

RESULT 5  
 US-09-439-313-378  
 Sequence: 378, Application US/09439313  
 Patent No. 6323505  
 GENERAL INFORMATION:  
 APPLICANT: Xu, Jiangchun  
 APPLICANT: Dillon, Davlin C.  
 APPLICANT: Mitcham, Jennifer L.  
 APPLICANT: Harlocker, Susan Louise  
 APPLICANT: Jiang Yugu  
 APPLICANT: Reed, Steven G.  
 APPLICANT: Kalos, Michael  
 APPLICANT: Fanger, Gary  
 APPLICANT: Retter, Mark  
 APPLICANT: Solk, John  
 APPLICANT: Day, Craig  
 TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND  
 TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER  
 FILE REFERENCE: 210121, 42709  
 CURRENT APPLICATION NUMBER: US/09/439, 313  
 CURRENT FILING DATE: 1999-11-12  
 NUMBER OF SEQ ID NOS: 575  
 SOFTWARE: FastSeq for Windows Version 3.0  
 SEQ ID NO 378  
 LENGTH: 1719  
 TYPE: PRF  
 ORGANISM: Homo sapien  
 OS: 439-313-378

Query Match	66.38;	Score 1136;	DB 4;	Length 1719;
Best Local Similarity	93.98;	Pred. No. 1.2e-120;		
Matches 216; Conservative	7;	Mismatches 7;	Indels 0;	Gaps 0

QY	86	P L I G S G S N V A N G D Y D D S F M P R H V N E D J K L H P R A M W K V P R K O L I Y A L R T D V	14.5
Dp	107	P C G S G S K S K G A N G D Y D S F M P R H V N E D J K L H P R A M W K V P R K O L I Y A L R T D V	166
QY	146	N K R D Q K R T A L H L A S A N S E F V Y K L V D R R C O L V N L N K K R T A L T K V A V C O E B C A L M L	205
Dp	167	N K K D Q K R T A L H L A S A N S E F V Y K L V D R R C O L V N L N K K R T A L T K V A V C O E B C A L M L	226
QY	206	E H G D P N I P D E Y G W T T L H Y A N N E D K I M A K A L L Y G A D I E S K N K H G L T P L L G I H E Q Q	265
Dp	227	E H G D P N I P D E Y G W T T L H Y A L Y N E D K I M A K A L L Y G A D I E S K N K H G L T P L L G V H E Q Q	286
QY	266	V K F L I K K A N L N L D R Y G R T A L L A V C C S A S I V S L L E O N D V S S O D L	315
Dp	287	V K F L I K K A N L N L D R Y G R T A L L A V C C S A S I V S L L E O N D V S S O D L	336

RESULT 6  
US-09-439-313-377

```

377; Sequence 377, Application US/09439313
378; Patent No. 6329505
379
380; GENERAL INFORMATION:
381; APPLICANT: Xu, Jiangchun
382; APPLICANT: Dillon, David C.
383; APPLICANT: Mitcham, Jennifer L.
384; APPLICANT: Harlocker, Susan Louise
385; APPLICANT: Jiang Yuqi
386; APPLICANT: Reed, Steven G.
387; APPLICANT: Kalos, Michel
388; APPLICANT: Fanger, Gary
389; APPLICANT: Retter, Mark
390; APPLICANT: Solk, John
391; APPLICANT: Day, Craig
392
393; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
394; TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER
395; FILE REFERENCE: 210121.427c9
396; CURRENT APPLICATION NUMBER: US/09/439,313
397; CURRENT FILING DATE: 1999-11-12
398; NUMBER OF SEQ ID NOS: 575
399
400; SOFTWARE: FastSeq for Windows Version 3.0
401; SEQ ID NO 377
402; LENGTH: 148
403
404; TYPE: PRT
405; ORGANISM: Homo sapien
406
407; FEATURE:
408; NAME/KEY: VARIANT
409; LOCATION: (1)..(148)
410; OTHER INFORMATION: Xaa = Any Amino Acid
411
412; US-09-439-313-377

```

Query Match	36.4%	Score 624;	DB 4;	Length 148;
Best Local Similarity	96.7%;	Pred. NO. 1.2e-63;		
Matches 119;	Conservative 0;	Mismatches 4;	Indels 0;	Gaps 0;

QY	127	MMGKVRPKDILYMLRFDYNNRKDKQRPALHLASANONSRYVLTVDPRCOLNVDNKKR	186
Db	25	MMGKVRPKDILYMLRFDYNNRKDKQRPALHLASANONSEVVALXIDRRCOQLVDNKKR	84
QY	187	TALTNRVOCOEBCALMLLEHGTDPNIPDEYGNLTTHAYVYNNEDIKIMAKALLYGADIES	246
Db	85	TALTNRVOCOEBCALMLLEHGTDPNIPDEYGNLTTHAYVYNNEDIKIMAKALLYGADIES	144
QY	247	KNK	249
Db	145	KNK	147

RESULT 7  
US-09-031-485-33  
Sequence 33, Application US/09031485  
Patent No. 5824306  
GENERAL INFORMATION:  
APPLICANT: Tang, Liang  
APPLICANT: Blehm, E. Scott  
TITLE OF INVENTION: DIROFILARIA AND BRUGIA ANKIRIN  
TITLE OF INVENTION: PROTEINS, NUCLEIC ACID MOLECULES, AND  
TITLE OF INVENTION: USES THEREOF  
NUMBER OF SEQUENCES: 85  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Carol Talkington Verser, Ph.D.  
ADDRESSEE: Heskia Corporation  
STREET: 1825 Sharp Point Drive  
CITY: Fort Collins  
STATE: Colorado  
COUNTRY: USA  
ZIP: 80525  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: Windows 95  
SOFTWARE: Wordperfect for Windows, Version 7.0

Only Match	Score	DB 2,	Length
Best Local Similarity	12.5%;	Pred. No. 5.8e-15;	1745;
Matches 88; Conservative	25.1%;	57; Mismatches 141;	Indels 65; Gaps 11;

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk

Query Match	12.5%;	Score 214.5;	DB 2;	Length 1745;
Best Local Similarity	25.1%;	Pred. No. 5.8e-15;		
Matches	88;	Conservative	57;	Mismatches 141;
			Indels	65;
			Gaps	11

## RESULT 9

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk

Query Match	12.5%;	Score 214.5;	DB 3;	Length 1745;
Best Local Similarity	25.1%;	Pred. No. 5.8e-15;		
Matches 88;	Conservative 57;	Mismatches 141;	Indels 65;	Gaps 11.

```

1  RESULT 10
2  US-08-810-712-10
3  Sequence 10 Application US/08810712G
4  Patent No. 6160106
5  GENERAL INFORMATION:
6  APPLICANT: Yeda Research and Development Co. LTD
7  TITLE OF INVENTION: Tumor Suppressor Genes, Proteins Encoded Thereby and
8  FILE REFERENCE: Use of said Genes and Proteins
9  FILE REFERENCE: sequence1st
10 CURRENT APPLICATION NUMBER: US/08/810,712G
11 CURRENT FILING DATE: 1997-03-03
12 EARLIER APPLICATION NUMBER: PCT/US94/11598
13 EARLIER FILING DATE: 1994-10-12
14 NUMBER OF SEQ. ID NOS: 31
15 SOFTWARE: PatentIn Ver. 2.1
16 SEQ. ID NO 10
17 LENGTH: 1423
18 TYPE: PRT
19 ORGANISM: Homo sapiens
20 US-08-810-712-10

```

## RESULT 11

Sequence 139, Application US/09065474  
Patent No. 6063599  
GENERAL INFORMATION:  
APPLICANT: Tang, Liang  
APPLICANT: Blehm, E. Scot  
TITLE OF INVENTION: DIOFILARIA AND BRUGIA ANKYRIN  
TITLE OF INVENTION: PROTEINS, NUCLEIC ACID MOLECULES, AND  
TITLE OF INVENTION: USES THEREOF  
NUMBER OF SEQUENCES: 171  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Carol Talkington Verser, Ph.D.  
ADDRESSEE: Heska Corporation  
STREET: 1825 Sharp Point Drive  
CITY: Fort Collins  
STATE: Colorado  
COUNTRY: USA  
ZIP: 80525  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: Windows 95  
SOFTWARE: Wordperfect for Windows, Version 7.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/065,474  
FILING DATE: 24-APR-1998  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Verser, Carol Talkington  
REGISTRATION NUMBER: 37,459  
REFERENCE/DOCKET NUMBER: HW-5-C1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 970/493-7272  
TELEFAX: 970/484-9505  
INFORMATION FOR SEQ ID NO: 139:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 352 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: Protein  
S-09-065-474-139

Query Match	12.1%	Score 208	DB 3	Length 352
Best Local Similarity	28.9%	Pred. No. 2.5e-15		
Matches	68	Conservative	38	Mismatches 89
				Indels 40
				Gaps 6



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Search completed: August 2, 2002, 08:44:06
Job time: 276 sec
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Fri Aug 2 09:28:57 2002

us-09-534-825a-299.rai

Page 8



45 193.3 11.3 2543

## ALIGNMENTS

RESULT 1  
US-09-439-313-376  
; Sequence 376, Application US/09439313  
; Patent No. 6329505  
; GENERAL INFORMATION:  
; APPLICANT: Xu, Jiangchun  
; APPLICANT: Dillon, Davin C.  
; APPLICANT: Mitcham, Jennifer L.  
; APPLICANT: Harlocker, Susan Louise  
; APPLICANT: Jiang Yuqi  
; APPLICANT: Reed, Steven G.  
; APPLICANT: Kalos, Michael  
; APPLICANT: Fanger, Gary  
; APPLICANT: Retter, Mark  
; APPLICANT: Solk, John  
; APPLICANT: Day, Craig  
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND  
; TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER  
; FILE REFERENCE: 210121.427C9  
; CURRENT APPLICATION NUMBER: US/09/439,313  
; CURRENT FILING DATE: 1999-11-12  
; NUMBER OF SEQ ID NOS: 575  
; SOFTWARE: FastSEQ for Windows Version 3.0  
; SEQ ID NO 376  
; LENGTH: 329  
; TYPE: PRT  
; ORGANISM: Homo sapien  
US-09-439-313-376

Query Match 100.0%; Score 1713; DB 4; Length 329;  
Best Local Similarity 100.0%; Pred. No. 5.7e-188;  
Matches 329; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MDIVVSGSHPLWVDSFLHLAGSDLLSRSLMAEYITIVHASFISCISSSLDGQGERQEQRG 60  
|  
Db 1 MDIVVSGSHPLWVDSFLHLAGSDLLSRSLMAEYITIVHASFISCISSSLDGQGERQEQRG 60  
  
Qy 61 HFWRPQRLLEDCEWQEVQVVLPLLPLQSGKSNVWAGDYDDSAFMDPRYHVHGEDLD 120  
|  
Db 61 HFWRPQRLLEDCEWQEVQVVLPLLPLQSGKSNVWAGDYDDSAFMDPRYHVHGEDLD 120  
  
Qy 121 KLHRAAWWGKVPKDLIVMLRDTDVNKRDKQKRTALHLASANGNSEVVKLVLDRRCOLNV 180  
|  
Db 121 KLHRAAWWGKVPKDLIVMLRDTDVNKRDKQKRTALHLASANGNSEVVKLVLDRRCOLNV 180  
  
Qy 181 LDNKKRTALTAKVQCQDECALMLEHGTDPNIPDEYGNNTLHYAVYNEDKLMKALLLY 240  
|  
Db 181 LDNKKRTALTAKVQCQDECALMLEHGTDPNIPDEYGNNTLHYAVYNEDKLMKALLLY 240

Qy 241 GADIESKNKHGLTPLLGIHEQKQVVKFLIKKKANLNALDRYGR TALILAVCCGSASIV 300  
|  
Db 241 GADIESKNKHGLTPLLGIHEQKQVVKFLIKKKANLNALDRYGR TALILAVCCGSASIV 300  
  
Qy 301 SPLEQNVDVSSQDLERRPESMLFLVIIM 329  
|  
Db 301 SPLEQNVDVSSQDLERRPESMLFLVIIM 329

RESULT 2  
US-09-534-825a-299.ra1

